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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/774,557

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Won-Kyu Jang

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EXAMINER

HERNANDEZ, NELSON D

ART UNIT

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2622

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/774,557	Applicant(s) JANG ET AL.	
	Examiner Nelson D. Hernández	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The Examiner acknowledges the amended claims filed on December 20, 2007.

Claim 1 has been amended. **Claims 9-11** have been newly added.

Response to Arguments

2. Applicant's arguments filed December 20, 2007 have been fully considered but they are not persuasive.

The Applicants argues the following:

- a. According to the MPEP, "in order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." See MPEP 2141.01(a), see also *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445. Sakamoto, for example, discloses a digital broadcast receiving device. A digital broadcast receiving device belongs to set-top box technology that is used to decode video and audio signals and transmit those signals to a display device, such as a television. The present application, in contrast, relates to a digital camera, which is not in the same field of endeavor as a set-top box. As would be appreciated by one skilled in the art, a camera and a set-top box have drastically different functionalities, structure, designs, components and parts. Because of the

differences between a set-top box and a camera, one skilled in the art would not look to a set-top box when evaluating features to be used in a camera.

- The Examiner disagrees with the Applicants. As discussed in the Office Action mailed on September 24, 2007, while it may not be explicitly stated in the references above that the functionality of an electronic device such as a digital broadcast receiving device may be realized by a camera, it is well known to a skilled artisan that a digital broadcast receiving device and a camera are in the same field of endeavor as they are both microcontroller/microprocessor controlled devices for processing data, such as imaging, image processing, and/or image manipulation. Although the Examiner understands that an electronic device such as an electronic camera and another electronic device such as a set-up-box have different functionalities, this would not impede one of an ordinary skill in the art to understand and notice the advantages of having an electronic device that after transmission of data to a storage device would cut the power supplied to the storage, thus resulting in a reduction of power conservation of the electronic device as disclosed in Sakamoto (col. 5, lines 1-30; col. 8, lines 40-54). This advantages would have prompted one of an ordinary skill in the art to implement an obvious variation of the Hatakeyama by applying the known concept and principles of having an electronic device that after transmission of data to a storage device would cut the power supplied to said storage device as disclosed in Sakamoto, to allow an electronic camera that transmits image data

to a storage device (in this case a USB device) to cut the supplied power to the storage device when transmission of image data is finished or completed.

And even if the two electronic devices (the electronic camera and the digital broadcast receiving device) are not in the same field of endeavor, the digital broadcast receiving device disclosed in the Sakamoto reference is reasonably pertinent to solving the problem of power conservation of an electronic device and would have commended themselves to an artisan addressing such a problem. In re Clay, 966 F.2d 656, 658, 23 USPQ2d 1058, 1060 (Fed. Cir. 1992).

b. “Moreover, nowhere does Sakamoto disclose that the set-top box technology can be used in a camera, or in any devices other than a set-top box. As clearly stated in the MPEP, simply because two devices involve the use of memories does not make the two devices in the same field of endeavor. See MPEP 2141.01 (a) (“Patent claims were directed to single in-line memory modules (SIMMs) for installation on a printed circuit motherboard for use in personal computers. Reference to a SIMM for an industrial controller was not necessarily in the same field of endeavor as the claimed subject matter merely because it related to memories. Reference was found to be in a different field of endeavor because it involved memory circuits in which modules of varying sizes may be added or replaced, whereas the claimed invention involved compact modular memories. Furthermore, since memory modules of the claims at issue

were intended for personal computers and used dynamic random-access-memories, whereas reference SIMM was developed for use in large industrial machine controllers and only taught the use of static random-access-memories or read-only- memories, the finding that the reference was nonanalogous was supported by substantial evidence." citing *Wang Laboratories, Inc. v. Toshiba Corp.*, 993 F.2d 858, 26 USPQ2d 1767 (Fed. Cir. 1993)). Thus, the mere fact that a digital camera and a digital broadcast receiver are both electronic devices does not make the references analogous.

Furthermore, Sakamoto discloses the use of an ISO 7816 smart card. See Sakamoto, col. 5, ln. 24. The present application discloses the use of a USB drive. Similar to the camera and the set-top box, a smart card and a USB drive have drastically different functionalities, structure, designs, components and parts. Because of the unique and different properties of a smart card and a USB drive, a digital broadcast receiving device would ordinarily utilize a smart card, and not a USB drive. Similarly, a digital camera would not utilize a smart card because of the limitation in storage, structure and cost. This is evident by the fact that none of the camera related references cited by the Examiner discloses the use of smart card with a digital camera. Hence, there is no motivation for one skilled in the art to combine Sakamoto with any digital camera references."

- The Examiner disagrees with the Applicants. The Examiner understands that both a USB drive and a smart card are considered pertinent to the art of storage devices. The Examiner understands that one of an ordinary skill in the

art would prefer one technology rather than others when designing an electronic device due to different limitations, storage capabilities or requirements for use. However, the Examiner believes that one of ordinary skill in the art would understand and notice the advantages of having an electronic device that after transmission of data to a storage device would cut the power supplied to a particular storage device, thus resulting in a reduction of power consumption of the electronic device as disclosed in Sakamoto (col. 5, lines 1-30; col. 8, lines 40-54). This advantage would have prompted one of ordinary skill in the art to implement an obvious variation of the Hatakeyama by applying the known concept and principles of having an electronic device that after transmission of data to a storage device would cut the power supplied to said storage device as disclosed in Sakamoto, to allow an electronic camera that transmits image data to a storage device (in this case a USB device) to cut the supplied power to the storage device when transmission of image data is finished or completed.

And even if the two electronic devices (the electronic camera and the digital broadcast receiving device) are not in the same field of endeavor, which the Examiner does not concede, the digital broadcast receiving device using a smart card to store data and controlling to cut power supplied to said smart card after transmission is completed as disclosed in the Sakamoto reference is reasonably pertinent to solving the problem of power conservation of an electronic device and would have commended themselves to an artisan

addressing such a problem. In re Clay, 966 F.2d 656, 658, 23 USPQ2d 1058, 1060 (Fed. Cir. 1992).

c. In addition, as explained by the Examiner, Hatakeyama discloses the suspension of power supply to the storage medium controller when the memory card is removed. Thus, the suspension of power supply to the storage medium was clearly a feature that was considered by Hatakeyama. However, as admitted by the Examiner, Hatakeyama fails to disclose cutting off the power supplied to the storage medium when transmission of data is completed. Applicants further submit that one skilled in the art would not have found it obvious to consider unrelated/nonanalogous set-top box and smart card technology in Sakamoto pertinent to the concerns in the design of a camera as taught by Hatakeyama.

- Arguments have been addressed above. Furthermore, the Examiner understands that one of an ordinary skill in the art would find obvious to apply the teaching and concepts shown in Sakamoto to modify the teaching of Hatakeyama to have the camera to cut the power supplied to the storage device when transmission of image data is complete in addition to cutting power when the storage device is removed.

2. Therefore, the Examiner understands that the rejections made to claims 5-8 are proper and therefore maintained.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1, 2 and 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatakeyama, US Patent 7,095,437 B1 in view of Barber et al., US Patent 7,209,648 B2 and further in view of Sakamoto, US Patent, 6,373,904 B1.**

Regarding claim 1, Hatakeyama discloses a digital camera (Figs. 1-5) comprising: a camera main body (See figs. 1-4) that obtains data of an object to be photographed by the digital camera; and a storage device (Fig. 5: 44) that receives the power data from the camera main body, stores the data, and transmits the stored data directly to a computer main body independent of the camera main body; Hatakeyama also discloses that the camera main body recognizes installation of the storage device after the power is fed to the storage device (Fig. 6: step S12), cuts off the power supplied to the storage device if the storage device is not installed (As shown in step S12, if the storage device is not connected, the camera would stop supplying power to the storage device controller 40 (col. 5, lines 36-57)), transmits the data to the storage device if the storage device is installed, (As taught in col. 3, line 43 – col. 4, line 15, Hatakeyama teaches storing the images captured by the camera upon operation of the shutter button. Transmitting data from a main body of the digital camera to the storage device if the storage device is installed is inherently in Hatakeyama, since the storage

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device has to be present in the camera in order to store image data) (Col. 1, lines 11-18; col. 3, line 43 – col. 4, line 15; col. 5, line 33 – col. 6, line 53).

Hatakeyama does not explicitly disclose that the storage device is a USB drive.

However, Barber et al. discloses the concept of using a USB hard drive stick as a recording medium (Col. 5, lines 20-25) to store the image data captured by a camera (See fig. 2) as an alternative to other storage mediums (Col. 3, line 57 – col. 5, line 25).

Therefore, taking the combined teaching of Hatakeyama in view of Barber et al. as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hatakeyama to use a USB drive as a storage device to store the captured image data. The motivation to do so would have been to use a storage device that can be connected to different processing systems and be easily recognized for its Plug-and-Play function in order to improve the transfer of image data between the camera and a computer or another external storage device; and to have the USB drive in close proximity to the digital camera.

The combined teaching of Hatakeyama in view of Barber et al. fails to teach that the camera main body cuts off the power supplied to the USB drive when transmission of the data is completed.

However, Sakamoto teaches a digital broadcast receiving device (See fig. 3) having connected a smart card (Fig. 3: 117) to record video data being watched for later use, wherein when the digital broadcast receiving device finish transferring data to the smart card, the processor (Fig. 3: 106) would turn off the power supply of the smart card

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with the purpose of obtaining low power consumption (Col. 4, lines 54-60; col. 5, lines 1-30; col. 8, lines 40-54).

While it may not be explicitly stated in the references above that the functionality of an electronic device such as a digital broadcast receiving device may be realized by a camera, it is well known to a skilled artisan that a digital broadcast receiving device and a camera are in the same field of endeavor as they are both electronic devices having microcontroller/microprocessor for processing data, such as imaging, image processing, and/or image manipulation.

Even if the two electronic devices (camera and the digital broadcast receiving device) are not in the same field of endeavor, which the examiner does not concede, the digital broadcast receiving device are reasonably pertinent to solving the problem of power conservation that the inventor of the present application is concerned to solve and would have commended themselves to an artisan addressing such a problem. In re Clay, 966 F.2d 656, 658, 23 USPQ2d 1058, 1060 (Fed. Cir. 1992).

Therefore, taking the combined teaching of Hatakeyama in view of Barber et al. and further in view of Sakamoto as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hatakeyama and Barber et al. to cut off the power supplied to the storage when transmission of the data is completed. The motivation to do so would have been to reduce the power consumption of the digital camera as suggested by Sakamoto (col. 5, lines 1-30; col. 8, lines 40-54).

Regarding claim 2, the combined teaching Hatakeyama in view of Barber et al. and further in view of Sakamoto as discussed and analyzed in claim 1 teaches that the camera main body has a USB port at one side (See Hatakeyama, figs. 3-4 as modified with the teaching of Barber et al.) thereof and the USB drive has a USB plug at one end portion thereof to be detachably coupled to the USB port (by teaching that the camera can use a USB hard drive stick to store the image data, Barber et al. inherently discloses that said USB hard drive stick has a USB plug at one end portion thereof to be detachably coupled to the USB port since USB drive are known as having a USB plug at one end portion thereof to be detachably coupled to the USB port of electronic devices). Grounds for rejecting claim 1 apply here.

Regarding claim 5, Hatakeyama discloses a method of delivering power to a storage device (Fig. 5: 44) of a digital camera (Fig. 5) comprising: (a) supplying power to the storage device (Fig. 6: step S10; Hatakeyama teaches supplying power to the storage device by teaching that if disconnection of the storage device is detected, the camera would stop supplying power to the storage device controller 40 (col. 5, lines 36-57); therefore the supplying of power to the storage device occurs when the camera is turned on); (b) recognizing installation of the storage device after the power is fed to the storage device (Fig. 6: step S12); (c) cutting off the power supplied to the storage device if the storage device is not installed (As shown in step S12, if the storage device is not connected, the camera would stop supplying power to the storage device controller 40 (col. 5, lines 36-57)); (d) transmitting data from a main body of the digital camera to the storage device if the storage device is installed (As taught in col. 3, line

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43 – col. 4, line 15, Hatakeyama teaches storing the images captured by the camera upon operation of the shutter button. Transmitting data from a main body of the digital camera to the storage device if the storage device is installed is inherently in Hatakeyama, since the storage device has to be present in the camera in order to store image data.) (Col. 3, line 43 – col. 4, line 15; col. 5, line 33 – col. 6, line 53).

Hatakeyama does not explicitly disclose that the storage device is a USB drive and cutting off the power supplied to the storage when transmission of the data is completed.

However, Barber et al. discloses the concept of using a USB hard drive stick as a recording medium (Col. 5, lines 20-25) to store the image data captured by a camera (See fig. 2) as an alternative to other storage mediums (Col. 3, line 57 – col. 5, line 25).

Therefore, taking the combined teaching Hatakeyama in view of Barber et al. as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of delivering power to a storage device in Hatakeyama by using a USB hard drive stick as a storage medium. The motivation to do so would have been to use a storage device that can be connected to different processing systems and be easily recognized for its Plug-and-Play function in order to improve the transfer of image data between the camera and a computer or another external storage device; and to have the USB drive in close proximity to the digital camera.

The combined teaching of Hatakeyama in view of Barber et al. fails to teach cutting off the power supplied to the storage when transmission of the data is completed.

However, Sakamoto teaches a digital broadcast receiving device (See fig. 3) having connected a smart card (Fig. 3: 117) to record video data being watched for later use, wherein when the digital broadcast receiving device finish transferring data to the smart card, the processor (Fig. 3: 106) would turn off the power supply of the smart card with the purpose of obtaining low power consumption (Col. 4, lines 54-60; col. 5, lines 1-30; col. 8, lines 40-54).

While it may not be explicitly stated in the references above that the functionality of an electronic device such as a digital broadcast receiving device may be realized by a camera, it is well known to a skilled artisan that a digital broadcast receiving device and a camera are in the same field of endeavor as they are both microcontroller/microprocessor controlled devices for processing data, such as imaging, image processing, and/or image manipulation.

Even if the camera and the digital broadcast receiving device are not in the same field of endeavor, which the examiner does not concede, the camera and the digital broadcast receiving device are reasonably pertinent to solving the problem of power conservation and would have commended themselves to an artisan addressing such a problem. In re Clay, 966 F.2d 656, 658, 23 USPQ2d 1058, 1060 (Fed. Cir. 1992).

Therefore, taking the combined teaching of Hatakeyama in view of Barber et al. and further in view of Sakamoto as a whole, it would have been obvious to one of

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ordinary skill in the art at the time the invention was made to modify Hatakeyama and Barber et al. by cutting off the power supplied to the storage when transmission of the data is completed. The motivation to do so would have been to reduce the power consumption of the digital camera as suggested by Sakamoto (col. 5, lines 1-30; col. 8, lines 40-54).

Regarding claim 6, the combined teaching of Hatakeyama in view of Barber et al. and further in view of Sakamoto as discussed and analyzed in claim 5 teaches that the steps (a), (b), (c), (d), and (e) are performed in sequential order. As discussed in claim 5, steps (a), (b), (c) and (d) are performed sequentially as taught by Hatakeyama in view of Barber et al. Although step (e) is taught in a different reference (Sakamoto), one of ordinary skill in the art would find obvious to perform said step after steps a-d since as suggested in Sakamoto the camera would cut the power after transmitting the image data to the USB drive. Therefore, grounds for rejecting claim 5 apply here.

Regarding claim 7, the combined teaching of Hatakeyama in view of Barber et al. and further in view of Sakamoto teaches the same as in claim 5.

Regarding claim 8, limitations have been discussed and analyzed in claim 5.

5. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatakeyama, US Patent 7,095,437 B1 and Barber et al., US Patent 7,209,648 B2 in view of Sakamoto, US Patent, 6,373,904 B1 and further in view of Schriefer, US 2004/0023520.

Regarding claims 3 and 4, the combined teaching Hatakeyama in view of Barber et al. and further in view of Sakamoto fails to teach that said USB plug is rotatable to be parallel or perpendicular to a lengthwise direction of the USB drive.

However, Schriefer teaches a USB memory device (Fig. 3B: 305 (also shown in fig. 2b of provisional Application 60/438,467)) comprising an adapter (Fig. 3B: 215 and fig. 4A: 215 (also shown in fig. 2b: 12 and fig. 1a: 12 of provisional Application 60/438,467)) that allows the USB memory device to be rotated in both the Y-Z planes so the USB can be in close proximity to the host device (Page 2, ¶ 0022-0024; page 3, ¶ 0030 (See also pages 3-5 of provisional Application 60/438,467)).

While it may not be explicitly stated in the references above that the functionality of an electronic device such as a computer using a USB memory device may be realized by a digital camera using a USB memory device to record image data, it is well known to a skilled artisan that digital cameras and computers are in the same field of endeavor as they are both microcontroller/microprocessor controlled electronic devices for processing data, such as imaging, image processing, and/or image manipulation.

Even if a digital camera using a USB memory device to record image data and a computer using a USB memory device are not in the same field of endeavor, which the examiner does not concede, the USB memory device as taught by Barber et al. and the

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USB memory device in Schriefer are reasonably pertinent to solving the problem of storing data from electronic host devices and would have commended themselves to an artisan addressing such a problem. In re Clay, 966 F.2d 656, 658, 23 USPQ2d 1058, 1060 (Fed. Cir. 1992).

Therefore, taking the combined teaching of Hatakeyama and Barber et al. in view of Sakamoto and further in view of Schriefer as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hatakeyama, Barber et al. and Sakamoto to have the USB plug rotatable to be parallel or perpendicular to a lengthwise direction of the USB drive. The motivation to do so would have been to have the USB drive in close proximity to the digital camera as suggested by Schriefer (Page 2, ¶ 0022-0024).

6. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatakeyama, US Patent 7,095,437 B1 and Barber et al., US Patent 7,209,648 B2 in view of Sakamoto, US Patent, 6,373,904 B1 and further in view of Kim, US 2003/0070103 A1.

Regarding claim 9, the combined teaching of Hatakeyama in view of Barber et al. and further in view of Sakamoto fails to teach that the camera main body recognizes installation of the USB drive by applying the power periodically to a USB drive port of the camera main body according to a particular timing and monitoring the USB drive port to detect a voltage at the USB drive port in response to the periodic power application to determine whether the USB drive is coupled to the USB drive port.

However, Kim discloses the concept of having an electronic device (Host 10 in combination with USB Hub 200 as shown in figs. 2, 4 and 5) supplying a periodic power (Page 2, ¶ 0026-0030) to a USB device (110 as shown in figs. 2, 4 and 4) according to a particular timing (Page 3, ¶ 0040-0041; Kim discloses periodically signaling the USB device to verify communication, identification or activation of a USB device) and monitoring the USB port (Hub 200) to detect a voltage at the USB port in response to the periodic power application to determine whether the USB device is connected, communicating or restarted communication with the USB port (Page 2, ¶ 0026-0030; page 3, ¶ 0040-0041).

While it may not be explicitly stated in the references above that the functionality of electronic devices such as a Host computer combined with a USB Hub may be realized by a camera, it is well known to a skilled artisan that a host computer and a camera are in the same field of endeavor as they are both electronic device having microcontroller/microprocessor controlled devices for processing data, such as image data, image processing, and/or image manipulation.

Even if the electronic devices (an electronic camera and a host computer with the USB Hub) are not in the same field of endeavor, which the examiner does not concede, the teaching of a Host computer having a USB Hub as disclosed in Kim is reasonably pertinent to solving the problem of power conservation and would have commended themselves to an artisan addressing such a problem. In re Clay, 966 F.2d 656, 658, 23 USPQ2d 1058, 1060 (Fed. Cir. 1992).

Therefore, taking the combined teaching of Hatakeyama and Barber et al. in view of Sakamoto and further in view of Kim as a whole, it would have been obvious to one of an ordinary skill in the art at the time the invention was made to apply the concept of recognizing the installation of the USB device by applying the power periodically to a USB port of the electronic device according to a particular timing and monitoring the USB port to detect a voltage at the USB port in response to the periodic power application to determine whether the USB device is coupled to the USB port as disclosed by Kim to the teaching of Hatakeyama, Barber et al. and Sakamoto to have the camera main body recognizing installation of the USB drive by applying the power periodically to a USB drive port of the camera main body according to a particular timing and monitoring the USB drive port to detect a voltage at the USB drive port in response to the periodic power application to determine whether the USB drive is coupled to the USB drive port. The motivation to do so would have been to reduce or prevent overall power consumption as suggested by Kim (Page 1, ¶ 0011-0012).

Regarding claim 10, limitations have been discussed and analyzed in claim 9.

Regarding claim 11, limitations have been discussed and analyzed in claim 9.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nelson D. Hernández whose telephone number is (571)272-7311. The examiner can normally be reached on 9:00 A.M. to 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lin Ye can be reached on (571) 272-7372. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NDHH
March 29, 2008

Nelson D. Hernández
Examiner
Art Unit 2622

/Nhan T. Tran/
Primary Examiner, Art Unit 2622